

Duval County Epidemiology Surveillance Report

The Florida Department of Health (DOH) in Duval County, Epidemiology

December 2015



Public Health Surveillance

Surveillance is a key core public health function and has been defined as the regular collection, meaningful analysis, and routine dissemination of relevant data for providing opportunities for public health action to prevent and control disease. Surveillance is done for many reasons such as identifying cases of diseases posing immediate risk to communities, detecting clusters and monitoring trends of disease that may represent outbreaks, evaluating control and prevention measures and developing hypotheses for emerging diseases.

Within Duval County, surveillance data is obtained through:

- Reports of notifiable diseases and conditions by providers (Merlin)
- Laboratory data from the Bureau of Laboratories
- Emergency department (ED) syndromic surveillance as monitored through Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE)
- Florida Poison Information Center Network (FPICN)
- ILINet Sentinel Provider Influenza Surveillance
- Passive reports from the community
 - Notifiable diseases
 - Outbreaks

Report Summary – December 2015

The month of December included a variety of surveillance and investigation activities within Duval County. These included monitoring enteric disease activity, influenza and RSV surveillance, and investigating numerous cases of reportable illness.

Influenza-like illness (ILI) activity remains low for this time of year. DOH-Duval continues to observe enteric illnesses.

Information on the *Current Increase in Reported Acute Hepatitis B Cases in Duval County* is highlighted in the other Notable Trends and Statistics section. Lastly, this edition's *notable investigation of the month* summarizes The Three Reported Cases of Pertussis in December.

Table of Contents

Enteric Disease Overview	Page 2
▪ Salmonellosis & enteric activity continues in Florida	
Respiratory Disease & Influenza-like Illness Overview	Pages 3 - 5
▪ Influenza plateau and RSV increase	
Mosquito-borne Illness Surveillance	Page 6
Other Notable Trends and Statistics	Page 7
▪ Acute Hepatitis B Trends	
▪ TB surveillance – Duval County – 51 active cases reported in 2015	
Table of Recently Reported Diseases/Conditions	Pages 8-9
Sexually Transmitted Disease Data	Page 10
Data Dictionary	Page 11
List of Reportable Diseases and Conditions	Page 12

Notable Investigations of the Month

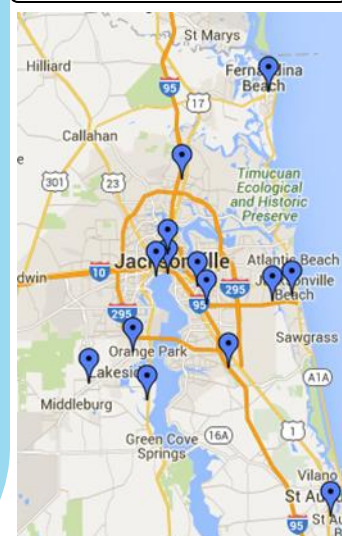
Three Cases of Pertussis Reported in December

Two probable and one confirmed case of Pertussis were reported to DOH-Duval Epidemiology in December 2015, two of the cases were also found to be co-infected with RSV.

- Case 1: A 2 week-old baby was seen by his primary provider with symptoms of apnea, paroxysmal coughing, post-tussive vomiting, and periods of stridor. Onset of cough was 12/9/2015. The infant tested PCR positive for both RSV and pertussis.
- Case 2: Upon further investigation it was determined that the mother of case 1 was experiencing paroxysmal coughing prior to and after the baby's birth, for a period greater than two weeks. Due to her being epi-linked to her PCR positive child, she was also considered a probable case.
- Case 3: A 7 month-old infant tested PCR positive for pertussis and was also co-infected with RSV. The infant experienced an onset of symptoms beginning on 12/7/2015 including: fever, paroxysmal coughing, post-tussive vomiting and a whoop.

None of the cases were vaccinated against pertussis, the mother of case 1 was offered a Tdap vaccine during the third month of her pregnancy but declined. Both infants were hospitalized for their illness and prior to hospitalizations visited multiple emergency departments and private providers. Close contacts of the cases were evaluated and prescribed prophylaxis as determined by DOH-Duval or their private physicians. All of the cases were treated and are recovering.

Figure 1: ESSENCE Hospitals



Enteric Disease Overview

Summary

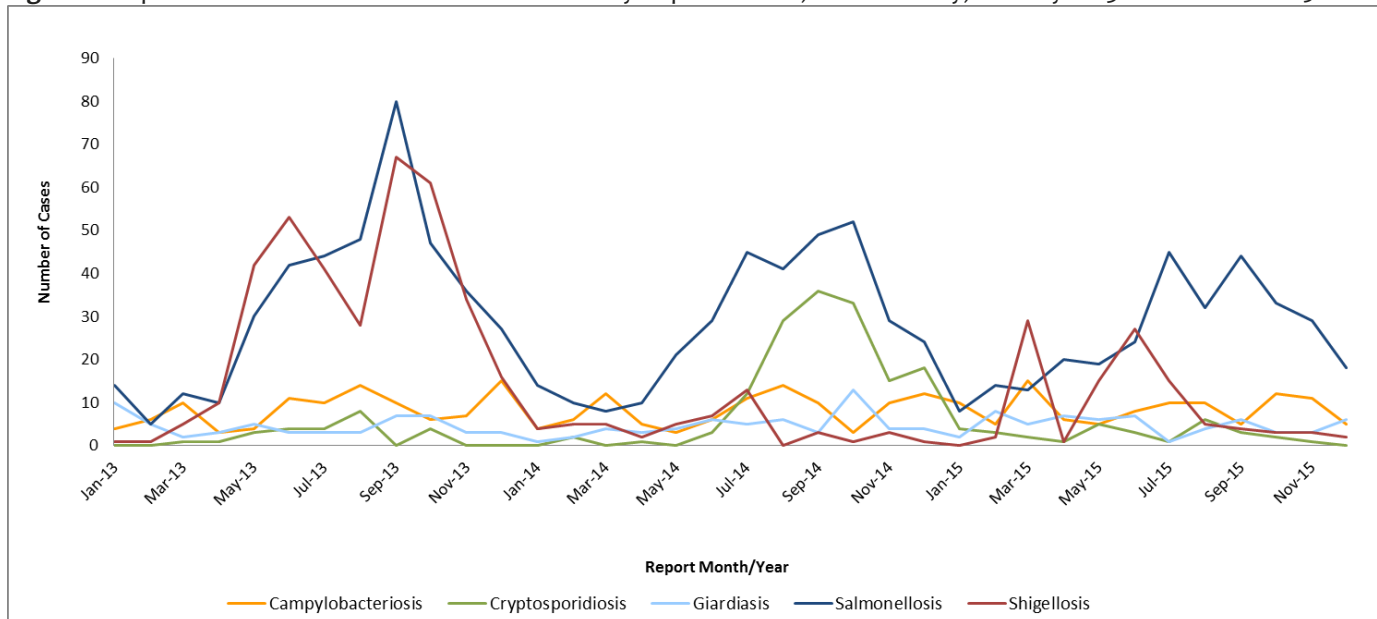
Reported cases of salmonellosis continued to decrease during the month of December (Figure 2). Eighteen (18) cases of salmonellosis were reported in December in Duval residents, which is lower than the expected number (Figure 2&3). The mean number of cases for the same time period during the previous five years was 29.2 cases. The most represented age group of reported cases of salmonellosis for 2015 occurred in the 0-4 age group (135/297, 45.4%). Cases of giardia elevated during the month of December with six (6) cases, all other cases of enteric diseases decreased, campylobacter (5), shigellosis (2), and cryptosporidiosis (0)(Figure 2).

Norovirus activity remains low in Florida. During December, one confirmed outbreak of norovirus GII was reported in Duval County, another suspected gastroenteritis outbreak was reported by the State of Florida within the month but was not confirmed as norovirus. One outbreak of norovirus occurred within the State of Florida during the month of November. (Source: FDENS EpiCom & DOH- Duval surveillance).

For prevention information, visit <http://www.cdc.gov/norovirus/> & <http://www.floridahealth.gov/diseases-and-conditions/norovirus-infection/index.html>

ESSENCE Reportable Disease Surveillance Data

Figure 2: Reported Cases of Select Enteric Conditions by Report Month, Duval County, January 2013 – December 2015



Additional Enteric Disease Trends Update

Figure 3: Reported Cases of Salmonellosis by Report Week- Duval County – Week 1, 2014- Week 52, 2015

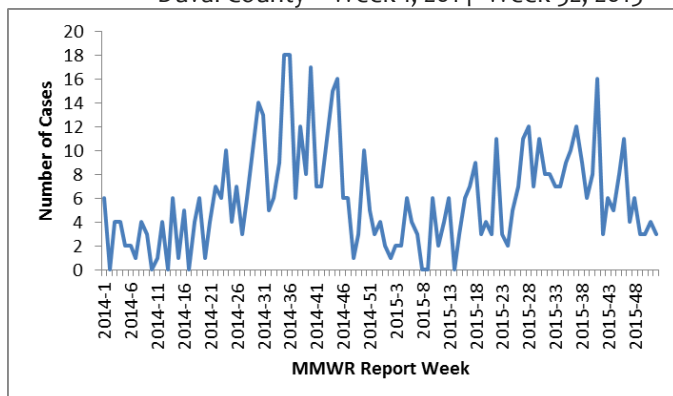
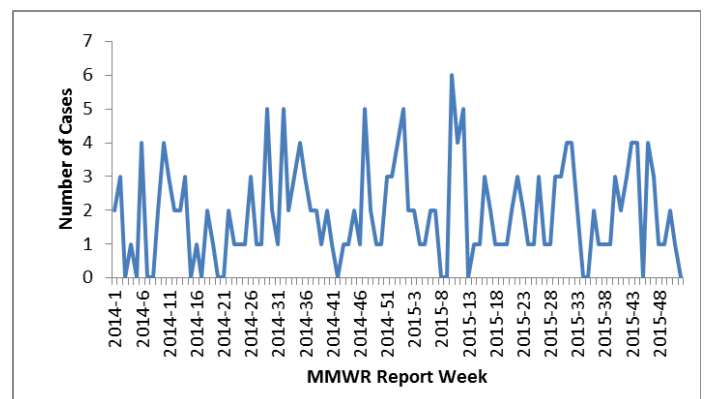


Figure 4: Reported Cases of Campylobacteriosis Report Week- Duval County – Week 1, 2014- Week 52, 2015



Respiratory Disease & ILI Overview

Summary

Currently, influenza-like illness (ILI) activity is at a low level and continues at a plateau as we progress through influenza season. In Duval County, ED visits for ILI as monitored through ESSENCE remained above 1% for the month of December (Figure 7), and is expected to remain above 1% for the remainder of the flu season. In December, there were two (2) positive influenza results within Duval County that were tested at the Bureau of Public Health Labs (BPHL) - Jacksonville. ILI ED visits in the age group of <1-19 remained elevated but are lower than at this time in previous influenza seasons (Figure 6). Other viruses known to be currently circulating, potentially causing ILI, include rhinovirus, adenovirus, parainfluenza, enterovirus, and respiratory syncytial virus (RSV).

Comprehensive Statewide Influenza Surveillance: <http://www.floridahealth.gov/diseases-and-conditions/influenza/Florida%20Influenza%20Surveillance%20Reports/index.html>

Figure 5: Percentage of ILI from ED Chief Complaints, Florida ESSENCE - Duval County Participating Hospitals (n=9)

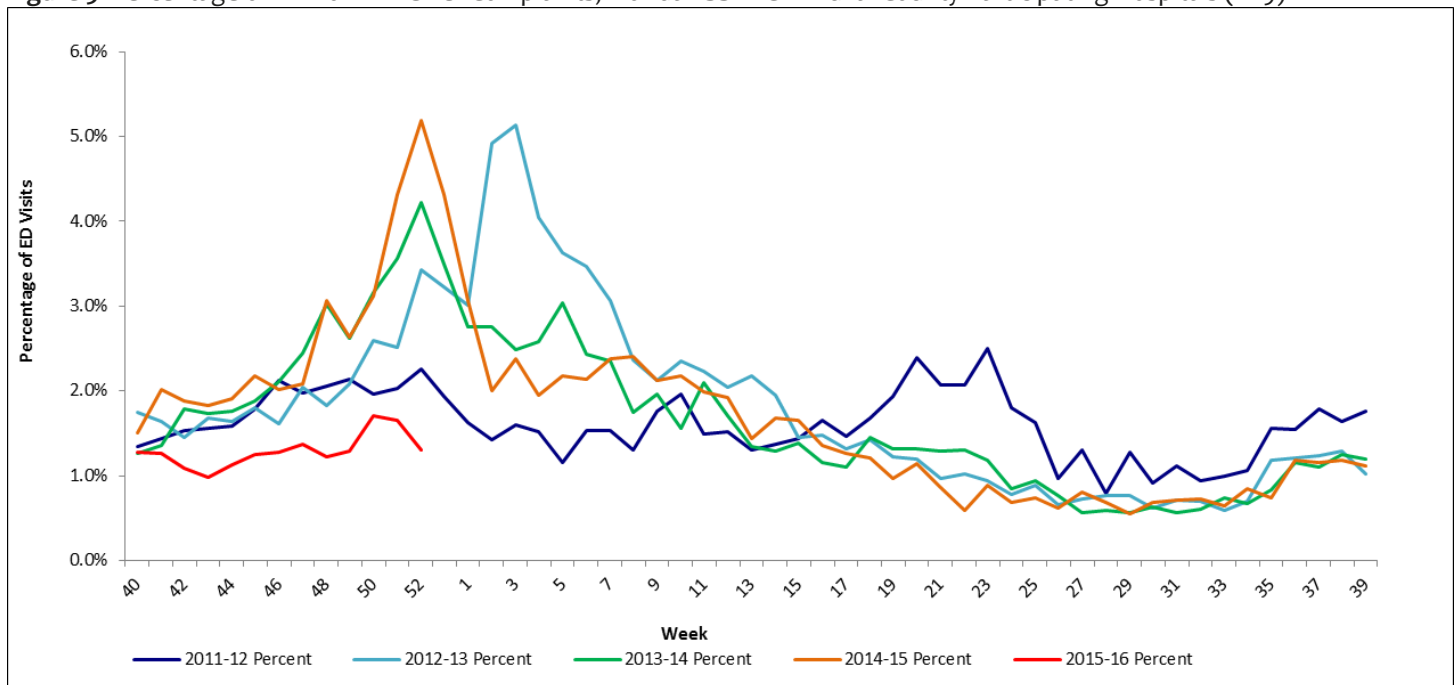
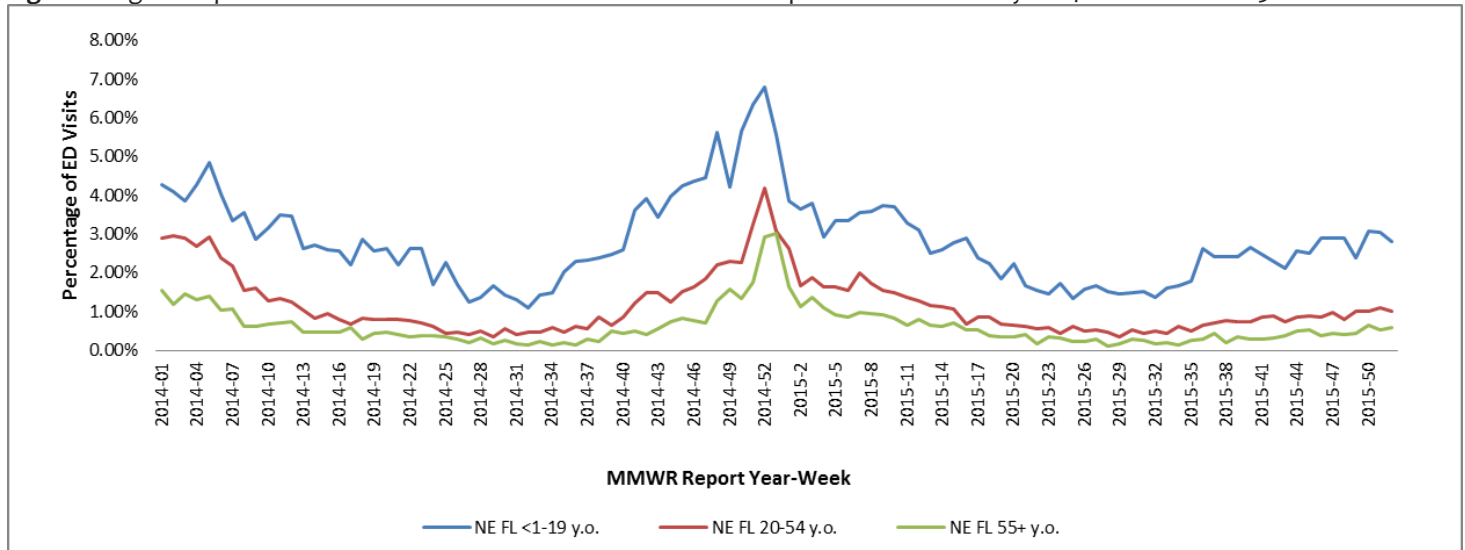


Figure 6: Age Comparison of ILI ED Visits NE FL ESSENCE Facilities - Reported From January 2014 - December 2015



Respiratory Disease & ILI Overview Continued

Summary

Within the last month, two (2) specimens have tested positive for influenza (influenza A H1N1 and influenza B unspecified) by the Bureau of Public Health Laboratories (BPHL). Influenza B Florida (12) remains the primary circulating strain detected by private labs (as reported through Electronic Lab Reporting (ELR), Figure 8).

Figure 7: Number of Specimens Tested by FL Bureau of Public Health Laboratories (BPHL) and Percent Positive for Influenza by Lab Event Date – Week 1, 2013 - Week 52, 2015 as Reported by Merlin - Duval County

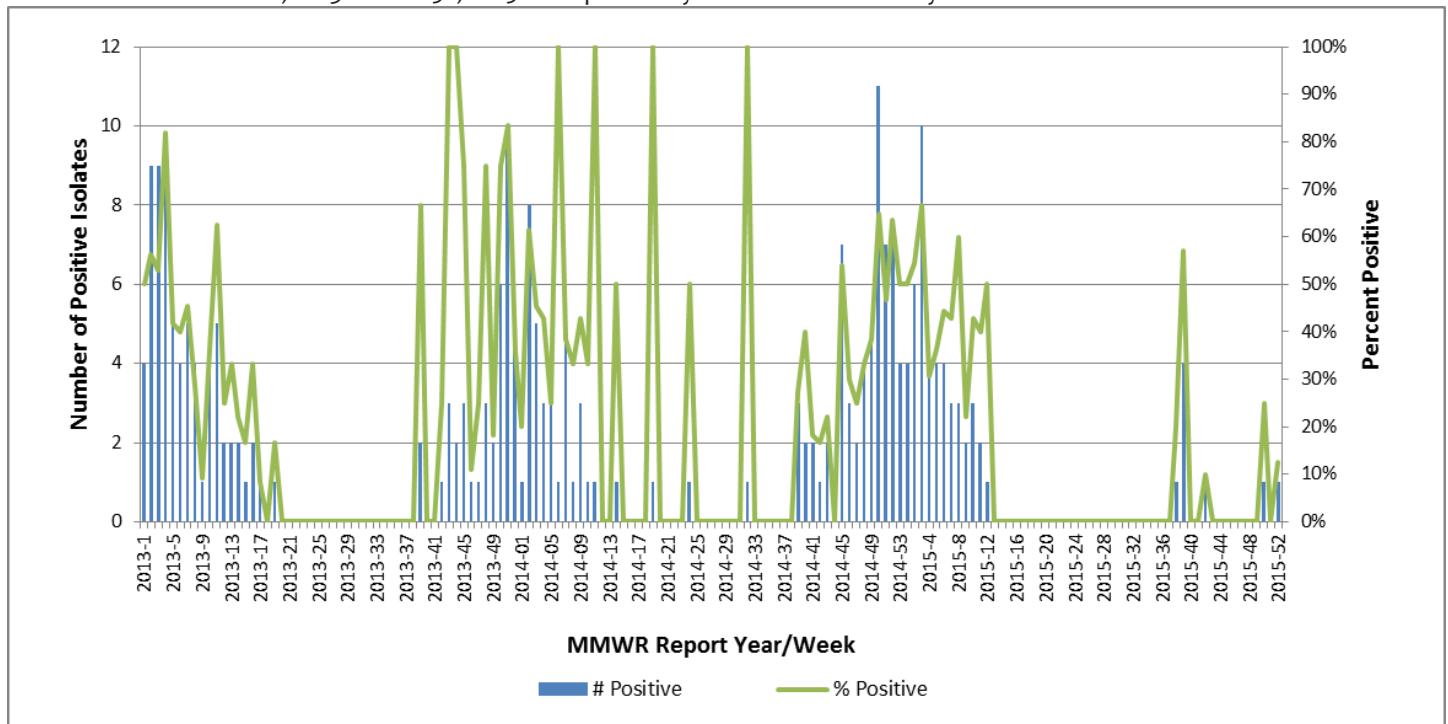
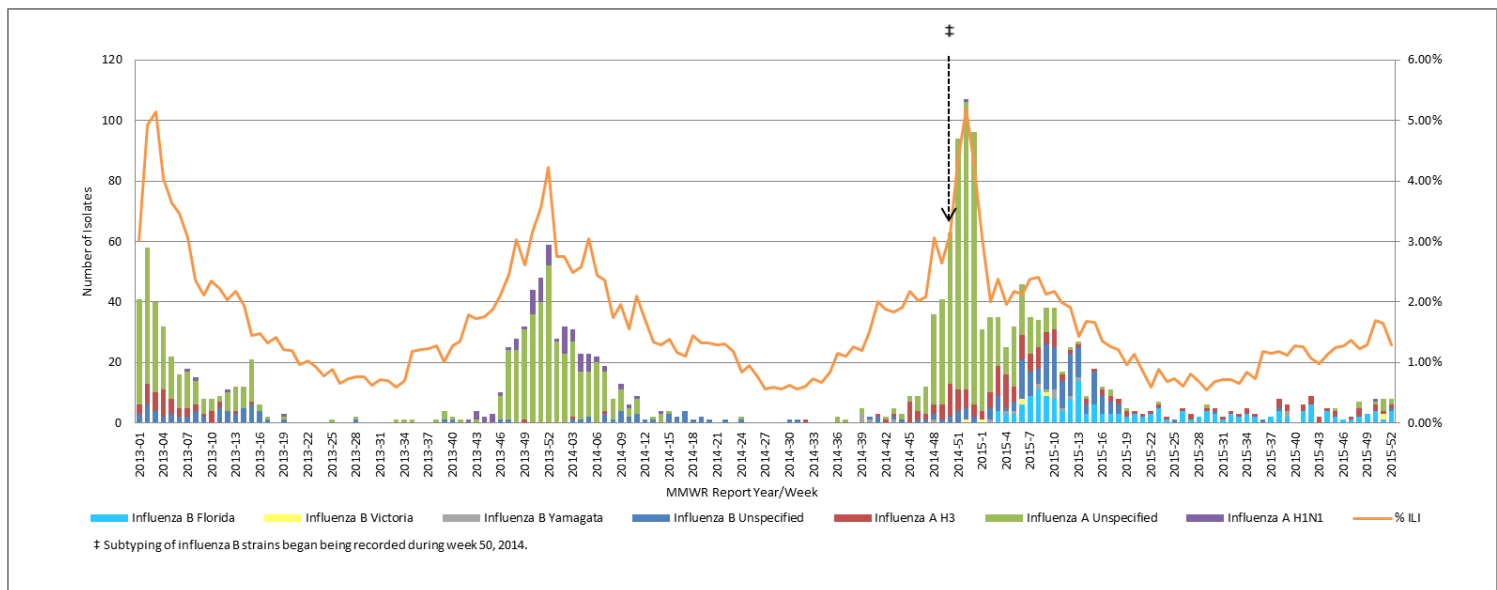


Figure 8: Number of Influenza-Positive Specimens Reported through Electronic Lab Reporting by Subtype by Lab Event Date as Reported by Merlin and Percent ILI in ESSENCE ED data – Week 1, 2013 - Week 52, 2015 - Duval County



Respiratory Virus Surveillance (NREVSS N. Region)

Summary

Circulation of influenza continues at a low level, while levels of RSV remained increased during the month of December. RSV season for the North Region of Florida traditionally runs from September to March. The percent positive for influenza reported in December by local hospital data is .55% (4/722) (Figure 9 and Figure 10). The percent positive for RSV specimens during the month of December was 30.2% (169/560) (Figure 11). In November, the percent positive for influenza via this reporting system was .36% and for RSV the percent positive was 29.0%.

Figure 9: Local Weekly Hospital Influenza A Surveillance Data- Reported From 11/3/2013-1/2/2016

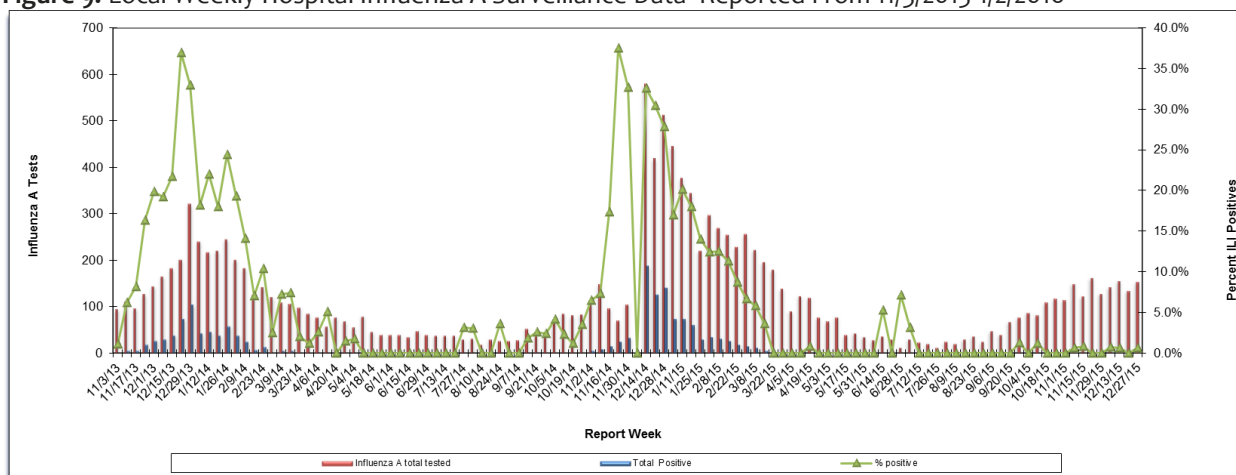


Figure 10: Local Weekly Hospital Influenza B Surveillance Data- Reported From 11/3/2013-1/2/2016

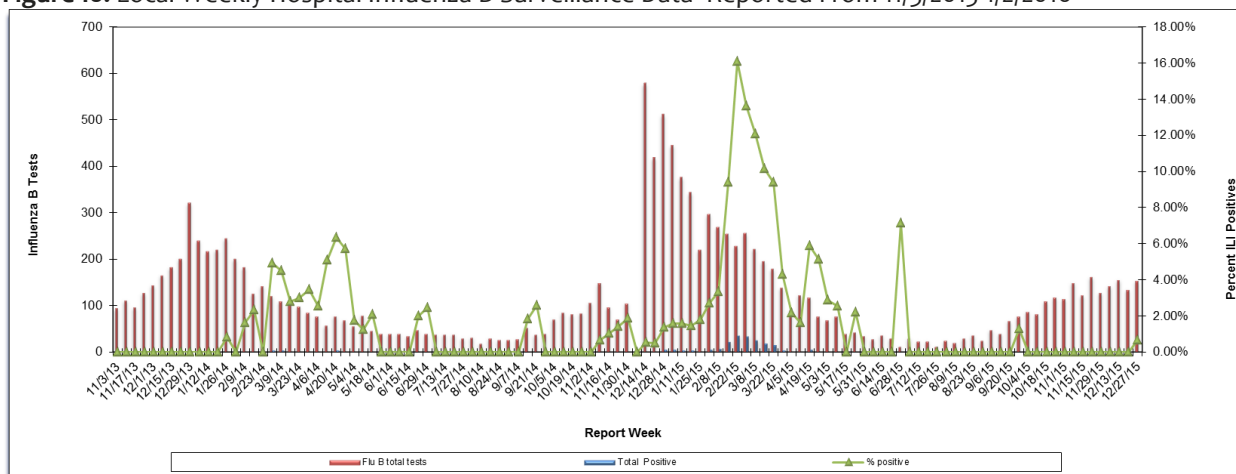
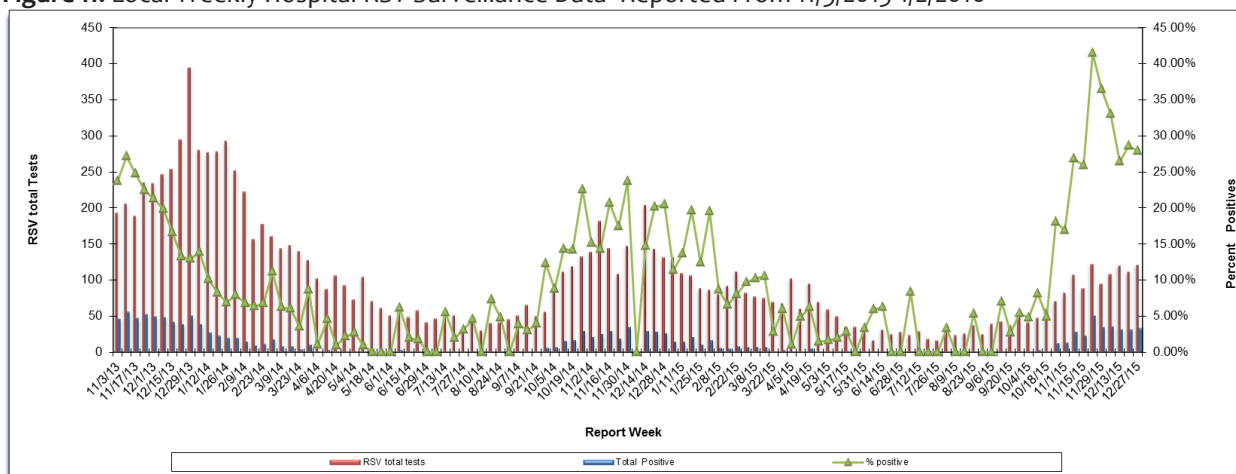


Figure 11: Local Weekly Hospital RSV Surveillance Data- Reported From 11/3/2013-1/2/2016



* Data was not reported for week 50, 2014

Florida Mosquito-Borne Disease Summary

MBI surveillance utilizes monitoring of arboviral seroconversions in sentinel chicken flocks, human surveillance, monitoring of mosquito pools, veterinary surveillance, and wild bird surveillance. MBI surveillance in Florida includes endemic viruses West Nile Virus (WNV), Eastern Equine Encephalitis Virus (EEEV), St. Louis Encephalitis Virus (SLEV), and Highlands J Virus (HJV), and exotic viruses such as Dengue Virus (DENV) and California Encephalitis Group Viruses (CEV). **Resources:** <http://www.doh.state.fl.us/Environment/medicine/arboviral/index.html>

Figure 11: Florida Arbovirus Surveillance
(January 1, 2015- December 31, 2015)

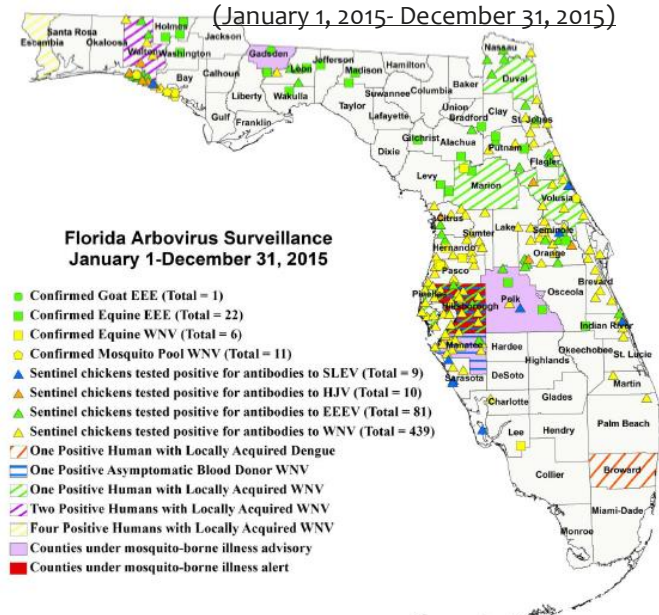


Table 1: Florida Mosquito-Borne Disease Surveillance Summary
Year to Date (through December 31, 2015)

Mosquito-Borne Disease	Human	Horses	Sentinel Chickens	Birds	Goats
West Nile Virus	11	6	439	-	-
St. Louis Encephalitis Virus	-	-	9	-	-
Highlands J Virus	-	-	10	-	-
California Encephalitis Group Viruses	-	-	-	-	-
Eastern Equine Encephalitis Virus	-	22	81	-	1

State of Florida 2015 Human Case Summary

West Nile Virus Illnesses Acquired in Florida: A total of eleven human cases of WNV illness acquired in Florida have been reported in 2015; one in Duval County (November), four in Escambia County (July, August, and September), one in Hillsborough County (September), one in Marion County (October), one in Pinellas County (July), one in Volusia County (July), and two in Walton County (June). Two asymptomatic positive blood donors have been reported in 2015; one in Hillsborough County (September) and one in Manatee County (October).

International Travel-Associated Chikungunya Fever Cases: Seventy-three cases of chikungunya with onset in 2015 have been reported in individuals with travel history to a chikungunya endemic country or area experiencing an outbreak in the two weeks prior to onset. Countries of origin were: Bolivia, Colombia (13), Dominican Republic, Ecuador, El Salvador (3), Guatemala (4), Haiti (2), Honduras (6), India (2), Jamaica (3), Mexico (11), Nicaragua (19), Puerto Rico (4), Trinidad and Tobago, Venezuela, and Virgin Islands. Counties reporting cases were: Brevard (2), Broward (9), Collier (2), Columbia, Duval (2), Escambia, Hardee, Hillsborough (3), Lake, Lee (2), Levy, Martin, Miami-Dade (27), Monroe, Orange (3), Osceola, Palm Beach (6), Pinellas, Polk, Sarasota, Seminole (3), and Volusia (3). One case was reported in a non-Florida resident.

International Travel-Associated Dengue Fever Cases: Eighty-two cases of dengue with onset in 2015 have been reported in individuals with travel history to a dengue endemic country in the two weeks prior to onset. Countries of origin were: Bangladesh, Brazil (5), Colombia, Costa Rica (3), Cuba (26), Dominican Republic (6), El Salvador, Guatemala, Haiti (11), Hawaii (3), Honduras, India (3), Jamaica, Mexico (3), Nicaragua (2), Philippines (4), Puerto Rico, Thailand, Venezuela (7), and Vietnam. Counties reporting cases were: Clay (2), Collier, Duval, Flagler, Hernando, Hillsborough (7), Broward (7), Lee (2), Miami-Dade (39), Monroe (2), Orange (2), Osceola, Palm Beach (7), Pinellas (3), St. Johns, St. Lucie (3), and Seminole (2). Seven cases were reported in non-Florida residents. In 2015, 39 of the 82 cases of dengue reported in Florida have been serotyped by PCR.

Dengue Fever Cases Acquired in Florida: In 2015, one case of locally acquired dengue fever has been reported in Broward County, with onset in October.

International Travel-Associated Malaria Cases: Fifty-one cases of malaria with onset in 2015 have been reported. Countries of origin were: Afghanistan, Angola, Cameroon (5), Central/South America (2), Democratic Republic of the Congo/Uganda, Dominican Republic (2), Eritrea, Gabon, Ghana (7), Guatemala (2), Haiti (5), India (4), Kenya, Malawi, Niger, Nigeria (8), Papua New Guinea, South Sudan, Sudan (3), Tanzania (2), and Uganda. Counties reporting cases were: Broward (10), Charlotte, Collier, Duval (2), Escambia, Hillsborough (2), Lake, Lee (2), Manatee (2), Monroe, Miami-Dade (13), Okaloosa, Orange (5), Osceola (2), Pinellas (2), Palm Beach (3), Sarasota, and Volusia. Twelve of the cases were reported in non-Florida residents.

Thirty-eight cases (75%) were diagnosed with *Plasmodium falciparum*. Eleven cases were diagnosed with *Plasmodium vivax* (22%). One case (2%) was diagnosed with *Plasmodium malariae*. One case was diagnosed with *Plasmodium ovale* (2%).

Other notable trends and statistics

Increasing Acute Hepatitis B Cases in Duval County

During the previous 10 years (2006-2015), Duval County has reported a total of 198 cases of Acute Hepatitis B infection. The yearly average of Acute Hepatitis B cases began to increase in 2012 with a total of 9 cases, and a total of 24 cases were reported in 2015 as seen in Figure 12. The majority of the cases in Duval County reported from 2006-2015 were males (61.62%) of Caucasian (49.49%) and African American (43.94%) descent between the ages of 35 and 54 (57.07%).

Figure 12: Reported Cases of Acute Hepatitis B by Report Date, Duval County 2006-2015

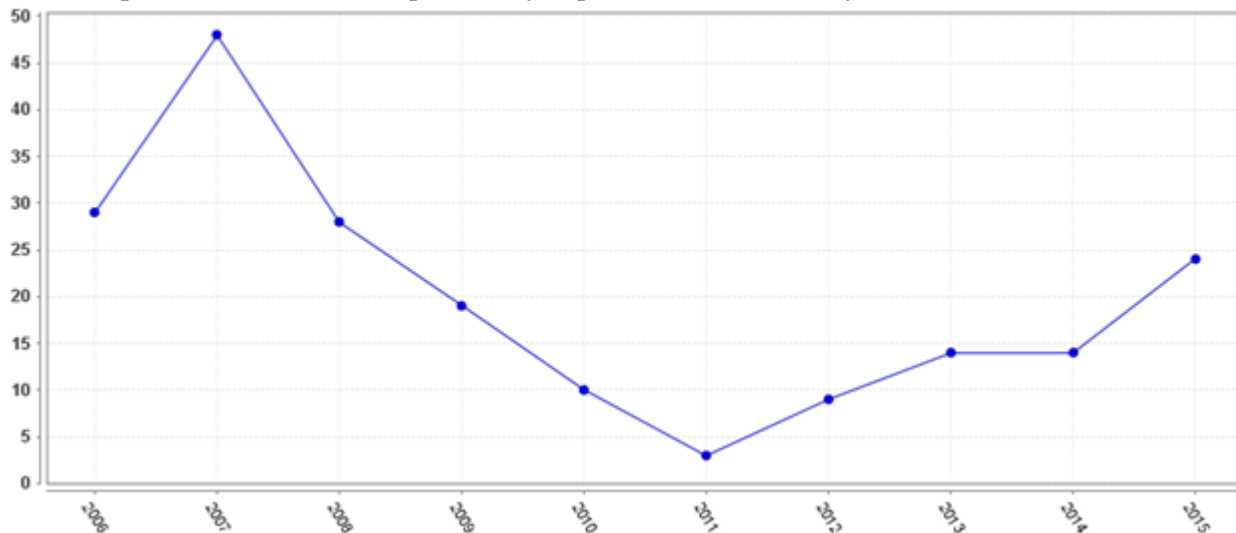


Table 2: Tuberculosis (TB) Surveillance – Duval County - 1/1/2015 through 12/31/2015 – All data are provisional

Forty-three (43) cases of TB were reported by Duval County in 2014.

Please note that this does not reflect a final case count for 2015. Final case count should be available 2/3/2016.

Demographics and risk factors of TB cases reported year-to-date for 2015.							
	Count	Total Cases	Percent		Count	Total Cases	Percent
Gender				Risk Factors			
Male	35	51	68.6%	Excess alcohol use within past year	17	51	33.3%
Female	16	51	31.4%	HIV co-infection*	3	51	5.9%
Country of Origin				Drug use within past year	10	51	19.6%
U.S.	39	51	76.5%	Homeless	10	51	19.6%
Non-U.S.	12	51	23.5%	Incarcerated at diagnosis	1	51	2.0%
Age Group				Unemployed	24	51	47.1%
0-9	4	51	7.8%	Race/ Ethnicity			
10-19	7	51	13.7%	Asian	7	51	13.7%
20-29	1	51	2.0%	Black	25	51	49.0%
30-39	6	51	11.8%	White	19	51	37.3%
40-49	12	51	23.5%	Hispanic**	3	51	5.9%
50-59	13	51	25.5%	Drug Resistance			
≥ 60	8	51	15.7%	Resistant to isoniazid***	3	29	10.3%

* 3 people has not been offered HIV testing at the time of this report

** Ethnicity is separate from race. A person can be in a race count and in ethnicity (e.g. White Hispanic)

*** For drug resistance testing, the total cases reflect the cases that have susceptibility testing completed.

For more tuberculosis surveillance data see: <http://www.floridahealth.gov/diseases-and-conditions/tuberculosis/tb-statistics/>

Recently Reported Diseases/Conditions in Florida

Table 3: Provisional Cases* of Selected Notifiable Disease, Duval County, Florida, December 2015

	Duval County						Florida					
	Month				Cumulative (YTD)		Month				Cumulative (YTD)	
	2015	2014	Mean†	Median¶	2015	2014	2015	2014	Mean†	Median¶	2015	2014
A. Vaccine Preventable Diseases												
Diphtheria	0	0	0	0	0	0	0	0	0	0	0	0
Measles	0	0	0	0	0	0	0	0	0	0	11	0
Mumps	0	0	0	0	0	0	0	0	1.2	2	11	1
Pertussis	3	2	3.6	2	33	66	38	24	37	28	351	722
Rubella	0	0	0	0	0	0	0	0	0	0	1	0
Tetanus	0	0	0	0	0	0	1	0	0.6	0	4	2
Varicella	2	3	3.6	3	38	45	53	60	58.8	60	761	575
B. CNS Diseases & Bacteremias												
Creutzfeldt-Jakob Disease	0	1	0.4	0	0	1	3	4	2.2	2	30	24
<i>H. influenzae</i> (invasive)	1	1	1.6	1	26	16	12	18	24.4	26	250	261
Meningitis (bacterial, cryptococcal, mycotic)	2	1	0.8	1	14	15	14	15	17.4	17	128	136
Meningococcal Disease	0	0	0.2	0	0	2	3	2	3.2	2	25	50
<i>Staphylococcus aureus</i> (VISA)	0	0	0	0	1	0	0	1	0.6	1	5	4
<i>Staphylococcus aureus</i> (VRSA)	0	0	0	0	0	0	0	0	0	0	0	0
<i>Streptococcus pneumoniae</i> (invasive disease)												
Drug resistant	3	0	3.2	3	16	16	18	26	57.4	53	174	396
Drug susceptible	2	5	4.4	4	13	27	31	35	62.6	65	277	413
C. Enteric Infections												
Campylobacteriosis	6	12	10.4	11	104	99	179	154	146.6	154	2176	2217
Cryptosporidiosis	0	18	4.6	0	32	150	48	110	52.2	40	884	1899
Cyclosporiasis	0	0	0	0	2	0	2	3	2.6	2	33	33
<i>E. coli</i> : Shiga Toxin-Producing (STEC)	0	0	0.4	0	6	3	12	6	8.2	10	122	121
Giardiasis	6	4	5.8	4	59	55	89	83	123.2	113	1068	1155
Hemolytic Uremic Syndrome	0	0	0	0	0	0	1	0	0.8	0	5	7
Listeriosis	0	1	0.2	0	1	4	1	4	6.4	4	49	48
Salmonellosis	18	26	29.2	28	308	351	576	433	474	461	6088	6060
Shigellosis	3	1	6	6	108	52	92	166	141.4	166	1770	2396
Typhoid Fever	0	0	0	0	0	0	0	1	0.6	1	6	15

Recently Reported Diseases/Conditions in Florida

	Duval County						Florida					
	Month				Cumulative (YTD)		Month				Cumulative (YTD)	
	2015	2014	Mean†	Median¶	2015	2014	2015	2014	Mean†	Median¶	2015	2014
D. Viral Hepatitis												
Hepatitis A	0	0	0.2	0	2	1	24	11	13.2	12	138	110
Hepatitis B, Acute	6	1	1	1	24	15	54	40	32.2	32	526	414
Hepatitis B +HBsAg in pregnant women	0	2	2	2	31	45	72	44	40.4	43	494	506
Hepatitis C, Acute	2	0	0.2	0	6	10	29	12	12.4	13	214	190
E. Vector Borne, Zoonoses												
Animal Rabies	0	0	0	0	0	3	7	14	10.6	12	84	94
Chikungunya Fever	0	0	0	0	2	15	5	54	10.8	0	130	480
Ciguatera	0	0	0	0	0	0	3	3	3	3	61	76
Dengue Fever	0	0	0.2	0	1	0	18	6	13.8	12	88	101
Eastern Equine Encephalitis††	0	0	0	0	0	0	0	0	0	0	0	1
Ehrlichiosis/Anaplasmosis¶¶	0	0	0	-	0	1	3	0	1.4	-	29	36
Leptospirosis	0	0	0	0	0	0	0	0	0.4	0	5	0
Lyme Disease	1	0	0.4	0	3	1	15	23	15.4	15	199	162
Malaria	1	0	0.2	0	3	3	6	9	8	6	55	69
St. Louis Encephalitis††	0	0	0	0	0	2	0	0	0	0	0	2
West Nile Virus††	0	0	0.2	-	1	2	1	0	1.2	-	13	19
F. Others												
Botulism-infant	0	0	0	0	0	0	0	0	0.2	0	0	0
Brucellosis	0	0	0	0	0	2	4	0	1.2	1	12	5
Carbon Monoxide Poisoning	1	2	0.6	0	3	7	17	22	16.6	12	230	157
Hansen's Disease (Leprosy)	0	0	0	0	2	0	8	2	1.6	2	28	10
Legionellosis	2	1	1.4	1	22	10	29	24	19.8	16	341	304
Vibrios	0	0	0	0	9	8	26	14	15.4		210	176

* Confirmed and probable cases based on date of report as reported in Merlin to the Bureau of Epidemiology. Incidence data for 2015 is provisional. **May include Non-Florida Cases.**

† Mean of the same month in the previous five years

¶ Median for the same month in the previous five years

** Includes *E. coli* O157:H7; shiga-toxin positive, serogroup non-O157; and shiga-toxin positive, not serogrouped, (Please note that suspect cases are not included in this report)

†† Includes neuroinvasive and non-neuroinvasive

¶¶ Includes *E. ewingii*, HGE, HME, and undetermined

Recently Reported Diseases/Conditions in Florida

Table 4: Duval County Reported Sexually Transmitted Disease for Summary for November 2015- All STD numbers are provisional.

For more STD surveillance data see: <http://www.floridahealth.gov/diseases-and-conditions/sexually-transmitted-diseases/std-statistics/>

Infectious and Early Latent Syphilis Cases

Sex	Area 4	%	Duval	%
Male	2	40%	2	40%
Female	3	60%	3	60%
Race	Area 4	%	Duval	%
White	2	40%	2	40%
Black	3	60%	3	60%
Hispanic	0	0%	0	0%
Other	0	0%	0	0%
Age	Area 4	%	Duval	%
0-14	0	0%	0	0%
15-19	0	0%	0	0%
20-24	0	0%	0	0%
25-29	0	0%	0	0%
30-39	3	60%	3	60%
40-49	2	40%	2	40%
50+	0	0%	0	0%
Total Cases	5		5	

Chlamydia Cases

Sex	Area 4	%	Duval	%
Male	145	30%	130	32%
Female	340	70%	280	68%
Race	Area 4	%	Duval	%
White	120	25%	82	20%
Black	243	50%	231	56%
Hispanic	8	2%	6	1%
Other	114	24%	91	22%
Age	Area 4	%	Duval	%
0-14	0	0%	0	0%
15-19	123	25%	94	23%
20-24	190	39%	158	39%
25-29	90	19%	84	20%
30-39	59	12%	53	13%
40-54	18	4%	18	4%
55+	5	1%	3	1%
Total Cases	485		410	

Gonorrhea Cases

Sex	Area 4	%	Duval	%
Male	88	53%	80	56%
Female	77	47%	63	44%
Race	Area 4	%	Duval	%
White	43	26%	30	21%
Black	100	61%	96	67%
Hispanic	1	1%	0	0%
Other	21	13%	17	12%
Age	Area 4	%	Duval	%
0-14	2	1%	2	1%
15-19	21	13%	17	12%
20-24	36	22%	30	21%
25-29	47	28%	45	31%
30-39	35	21%	28	20%
40-54	19	12%	16	11%
55+	5	3%	5	3%
Total Cases	165		143	

* Area 4 consists of Baker, Clay, Duval, Nassau, and St. Johns

Data Dictionary

Merlin: The Merlin system is essential to the control of disease in Florida. It serves as the state's repository of reportable disease case reports, and features automated notification of staff about individual cases of high-priority diseases. All reportable disease data presented for this report has been abstracted from Merlin, and as such are provisional. Data collected in Merlin can be viewed using <http://www.floridacharts.com/merlin/freqrpt.asp>.

Event Date: Reportable diseases and conditions presented within this report are reported by event date. This is the earliest date associated with the case. In most instances, this date represents the onset of illness. If this date is unknown, the laboratory report date is utilized as the earliest date associated with a case.

ILINet (previously referred to as the Sentinel Provider Influenza Surveillance Program): The Outpatient Influenza-like Illness Surveillance Network (ILINet) consists of more than 3,000 healthcare providers in all 50 states, the District of Columbia, and the U.S. Virgin Islands reporting over 25 million patient visits each year. Each week, approximately 1,400 outpatient care sites around the country report data to CDC on the total number of patients seen and the number of those patients with ILI by age group. For this system, ILI is defined as fever (temperature of 100°F [37.8°C] or greater) and a cough and/or a sore throat in the absence of a KNOWN cause other than influenza. The percentage of patient visits to healthcare providers for ILI reported each week is weighted on the basis of state population. This percentage is compared each week with the national baseline of 2.5%. Duval County has 5 ILINet providers that contribute to the state and national data.

NREVSS: The National Respiratory and Enteric Virus Surveillance System (NREVSS) is a laboratory-based system that monitors temporal and geographic patterns associated with the detection of respiratory syncytial virus (RSV), human parainfluenza viruses (HPIV), respiratory and enteric adenoviruses, and rotavirus.

MMWR week: The week of the epidemiologic year for which the National Notifiable Diseases Surveillance System (NNDSS) disease report is assigned by the reporting local or state health department for the purposes of *Morbidity and Mortality Weekly Report* (MMWR) disease incidence reporting and publishing. Values for MMWR week range from 1 to 53, although most years consist of 52 weeks.

Syndromic Surveillance: An investigational approach where epidemiologists use automated data acquisition and generation of statistical signals, monitor disease indicators continually (real time) or at least daily (near real time) to detect outbreaks of diseases earlier and more completely than might otherwise be possible with traditional public health surveillance (e.g., reportable disease surveillance and telephone consultation).

ESSENCE: The Electronic Surveillance System for the Early Notification of Community-Based Epidemics (**ESSENCE**) is a syndromic surveillance system for capturing and analyzing public health indicators for early detection of disease outbreaks. ESSENCE utilizes hospital emergency department chief complaint data to monitor disease indicators in the form of syndromes for anomalies. ESSENCE performs automatic data analysis, establishing a baseline with a 28-day average. Daily case data is then analyzed against this baseline to identify statistically significant increases. A yellow flag indicates a warning and a red flag indicates an alert. Currently, all nine Duval County Hospitals are sending ED data to the ESSENCE system; an additional 5, three in Clay, one in St Johns, and one in Nassau County, provide regional coverage. The 14 reporting hospitals in our region include Baptist Beaches (Duval), Baptist Clay (Clay), Baptist Downtown (Duval), Baptist Nassau (Nassau), Baptist South (Duval), Flagler (St. Johns), Memorial (Duval), Mayo (Duval), Orange Park (Clay), Shands Jacksonville (Duval), Shands Jacksonville North (Duval), St. Vincent's (Duval), St. Vincent's Clay (Clay), and St. Vincent's Southside (Duval).

Chief Complaint (CC): The concise statement describing the symptom, problem, condition, diagnosis, physician recommended return, or other factor that is the reason for a medical encounter.

Syndrome: A set of chief complaints, signs and/or symptoms representative of a condition that may be consistent with a CDC defined disease of public health significance. ESSENCE syndrome categories include botulism-like, exposure, fever, gastrointestinal, hemorrhagic, ILI, neurological, rash, respiratory, shock/coma, injury, and other.

Count: The number of emergency department visits relating to a syndrome of query.

Other Links and Resources:

Florida Department of Health, Bureau of Epidemiology: http://www.doh.state.fl.us/disease_ctrl/epi/index.html

Florida Annual Morbidity Reports: <http://www.floridahealth.gov/diseases-and-conditions/disease-reporting-and-management/disease-reporting-and-surveillance/data-and-publications/fl-amsr1.html>

Influenza Surveillance Reports:

<http://www.floridahealth.gov/diseases-and-conditions/influenza/florida-influenza-weekly-surveillance.htm>

Reportable Diseases/Conditions in Florida

Practitioner List (Laboratory Requirements Differ)

Effective June 4, 2014



Did you know that you are required* to report certain diseases to your local county health department?

DOH-Duval Disease reporting telephone numbers:

AIDS, HIV - (904) 253-2989, (904) 253-2955
STD - (904) 253-2974, Fax - (904) 253-2601
TB Control - (904) 253-1070, Fax - (904) 253-1943
All Others- (904) 253-1850, Fax - (904) 253-1851
After Hours Emergency - (904) 434-6035

- ! Report immediately 24/7 by phone upon initial suspicion or laboratory test order
- ☎ Report immediately 24/7 by phone
- * Report next business day
- + Other reporting timeframe

- ! Outbreaks of any disease, any case, cluster of cases, or exposure to an infectious or non-infectious disease, condition, or agent found in the general community or any defined setting (e.g., hospital, school, other institution) not listed that is of urgent public health significance
- + Acquired immune deficiency syndrome (AIDS)
- ☎ Amebic encephalitis
- ! Anthrax
- * Arsenic poisoning
- * Arboviral diseases not otherwise listed
- ! Botulism, foodborne, wound, and unspecified
- * Botulism, infant
- ! Brucellosis
- * California serogroup virus disease
- * Campylobacteriosis
- + Cancer, excluding non-melanoma skin cancer and including benign and borderline intracranial and CNS tumors
- * Carbon monoxide poisoning
- * Chancroid
- * Chikungunya fever
- ☎ Chikungunya fever, locally acquired
- * Chlamydia
- ! Cholera (*Vibrio cholerae* type O1)
- * Ciguatera fish poisoning
- + Congenital anomalies
- * Conjunctivitis in neonates <14 days old
- * Creutzfeldt-Jakob disease (CJD)
- * Cryptosporidiosis
- * Cyclosporiasis
- * Dengue fever
- ☎ Dengue fever, locally acquired
- ! Diphtheria
- * Eastern equine encephalitis
- * Ehrlichiosis/anaplasmosis
- * *Escherichia coli* infection, Shiga toxin-producing
- * Giardiasis, acute
- ! Glanders
- * Gonorrhea

- * Granuloma inguinale
- ! *Haemophilus influenzae* invasive disease in children <5 years old
- * Hansen's disease (leprosy)
- ☎ Hantavirus infection
- ☎ Hemolytic uremic syndrome (HUS)
- ☎ Hepatitis A
- * Hepatitis B, C, D, E, and G
- * Hepatitis B surface antigen in pregnant women or children <2 years old
- ☎ Herpes B virus, possible exposure
- * Herpes simplex virus (HSV) in infants <60 days old with disseminated infection and liver involvement; encephalitis; and infections limited to skin, eyes, and mouth; anogenital HSV in children <12 years old
- + Human immunodeficiency virus (HIV) infection
- * HIV, exposed infants <18 months old born to an HIV-infected woman
- * Human papillomavirus (HPV), associated laryngeal papillomas or recurrent respiratory papillomatosis in children <6 years old; anogenital papillomas in children <12 years old
- ! Influenza A, novel or pandemic strains
- ☎ Influenza-associated pediatric mortality in children <18 years old
- * Lead poisoning
- * Legionellosis
- * Leptospirosis
- ☎ Listeriosis
- * Lyme disease
- * Lymphogranuloma venereum (LGV)
- * Malaria
- ! Measles (rubeola)
- ! Melioidosis
- * Meningitis, bacterial or mycotic
- ! Meningococcal disease
- * Mercury poisoning
- * Mumps
- + Neonatal abstinence syndrome (NAS)
- ☎ Neurotoxic shellfish poisoning
- ☎ Pertussis
- * Pesticide-related illness and injury, acute

- ! Plague
- ! Poliomyelitis
- * Psittacosis (ornithosis)
- * Q Fever
- ☎ Rabies, animal or human
- ! Rabies, possible exposure
- ! Ricin toxin poisoning
- * Rocky Mountain spotted fever and other spotted fever rickettsioses
- ! Rubella
- * St. Louis encephalitis
- * Salmonellosis
- * Saxitoxin poisoning (paralytic shellfish poisoning)
- ! Severe acute respiratory disease syndrome associated with coronavirus infection
- * Shigellosis
- ! Smallpox
- ☎ Staphylococcal enterotoxin B poisoning
- ☎ *Staphylococcus aureus* infection, intermediate or full resistance to vancomycin (VISA, VRSA)
- * *Streptococcus pneumoniae* invasive disease in children <6 years old
- * Syphilis
- ☎ Syphilis in pregnant women and neonates
- * Tetanus
- * Trichinellosis (trichinosis)
- * Tuberculosis (TB)
- ! Tularemia
- ☎ Typhoid fever (*Salmonella* serotype Typhi)
- ! Typhus fever, epidemic
- ! Vaccinia disease
- * Varicella (chickenpox)
- ! Venezuelan equine encephalitis
- * Vibriosis (infections of *Vibrio* species and closely related organisms, excluding *Vibrio cholerae* type O1)
- ! Viral hemorrhagic fevers
- * West Nile virus disease
- ! Yellow fever

*Section 381.0031 (2), *Florida Statutes* (F.S.), provides that "Any practitioner licensed in this state to practice medicine, osteopathic medicine, chiropractic medicine, naturopathy, or veterinary medicine; any hospital licensed under part I of chapter 395; or any laboratory licensed under chapter 483 that diagnoses or suspects the existence of a disease of public health significance shall immediately report the fact to the Department of Health." Florida's county health departments serve as the Department's representative in this reporting requirement. Furthermore, Section 381.0031 (4), F.S. provides that "The department shall periodically issue a list of infectious or noninfectious diseases determined by it to be a threat to public health and therefore of significance to public health and shall furnish a copy of the list to the practitioners..."